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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,474	08/08/2000	Hugh C. Gardner	34,040.02	4456
4249	7590	04/09/2004	EXAMINER	
CAROL WILSON BP AMERICA INC. MAIL CODE 5 EAST 4101 WINFIELD ROAD WARRENVILLE, IL 60555			JUSKA, CHERYL ANN	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SUPPLEMENTAL
Office Action Summary

Application No.

09/634,474

Applicant(s)

GARDNER ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 16, 40-49 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 16 and 40-45 is/are rejected.
- 7) ☒ Claim(s) 46-49 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 10/14/03 and 02/18/04 have been entered.

Response to Amendment

2. Applicant's amendment filed on February 18, 2004 is compliant. Thus, said amendment is entered. Claims 1-14, 17-39, 50, and 52-59 are cancelled, while claims 15, 16, and 46 are amended as requested. The pending claims are 15, 16, 40-49, and 51.

3. Said amendment is sufficient to overcome the 102 rejection by Leib (US 4,242,394) as set forth in section 4 of the Final Rejection of March 27, 2003. Specifically, applicant has amended claim 15 to limit the carpet backing to *consist* of the nonwoven adhesive fabric and a woven primary or secondary backing, which excludes Leib's additional layer of a fibrous capping layer. Similarly, said amendment is sufficient to overcome the 103 rejections based upon said Leib reference as set forth in sections 8 and 9 of the Final Rejection.

4. Additionally, the cancellation of claims 52, 54, and 55 renders moot the rejection of said claims as set forth in sections 5 and 6 of the Final Rejection. Similarly, the cancellation of

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claims 56-59 renders moot the 103 rejection of said claims as set forth in section 8 of the Final Rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 15, 16, 40-43, and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,380,574 issued to Katoh et al.

Katoh discloses a double-sided carpet mat comprising a primary backing consisting of a base fabric and a nonwoven fabric, wherein said primary backing has yarn piles tufted therethrough (abstract). Specifically, the base fabric is preferably a plain weave fabric of polypropylene tape yarns, while the nonwoven fabric may be needlepunched nonwoven having binder fibers or a spunbond nonwoven (col. 2, lines 46-53 and col. 2, line 67-col. 3, line 24). Suitable materials for said nonwoven include fibers having a melting point ranging from 80-260°C, preferably from 90-145°C, such as polyethylene, polypropylene, polyamide, or polyester filaments (col. 2, lines 54-66). The base fabric and the nonwoven fabric are united by needlepunching (col. 3, lines 35-60). The basis weight of the nonwoven fabric preferably ranges from 30 to 300 g/m² (about 0.9 – 9 oz/yd²) (col. 3, lines 8-10). Thus, Katoh anticipates claims 15, 16, 40-43, and 45.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 15, 16, 40-43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,140,071 issued to Gee et al. in view of the cited Katoh reference.

Gee discloses a process for preparing a tufted carpet consisting of feeding simultaneously into a tufting machine (a) a woven or bonded nonwoven fabric of continuous polypropylene filaments and (b) a bonded nonwoven sheet of continuous filaments (abstract). Said sheets are fed into the tufting machine in surface contact with each other so that the tufts of yarn secures the two sheets together. The woven fabric may be a conventional woven primary backing (i.e., polypropylene continuous ribbon filaments) (col. 2, lines 4-16). The bonded nonwoven second sheet may be a spunbond nonwoven fabric (col. 2, lines 22-33). Thus, Gee teaches a tufted primary backing comprising a dual layer primary backing consisting of a woven polypropylene tape yarn fabric and a spunbond nonwoven fabric.

Gee lacks a teaching that the two sheet layers are attached together prior to tufting, as is presently claimed. However, it would have been obvious to one skilled in the art to adhere the two sheets together prior to feeding into a tufting machine in order to produce a preformed dual layer primary backing that does not require modification of a tufting process line. Specifically,

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conventional tufting process line will have only one feed roll for the primary backing to be tufted, while the invention of Gee requires two feeder rolls. For example, Katoh teaches bonding together by needlepunching a woven primary backing and a spunbond nonwoven to produce a dual layer composite primary backing (abstract). Thus, it would be obvious to bond together the two layers prior to tufting in order to produce a tufted dual layer primary backing without modification of a conventional tufting process line. Additionally, one might be motivated to produce the preformed dual layer primary backing in order to provide a product ready for use by a carpet manufacturer. Furthermore, it would have been obvious to adhere the two sheets by means of thermal bonding and/or needlepunching since said means are both well known in the art as means of forming fabric laminates. Therefore, claims 15, 16, 40-43, and 45 are rejected as being obvious over the cited prior art.

10. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Katoh reference as applied to claim 44 above.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Gee and Katoh references as applied to claim 44 above.

Katoh does not explicitly teach the filaments of the nonwoven have a melting point at least about 20°C less than the melting point of the base fabric. However, Katoh does teach an embodiment wherein the nonwoven fabric is made from a polyethylene fibrous binder having a melting point of about 115°C, while the base fabric is made of high-density polyethylene tape yarns (col. 11, lines 31-35). Since HDPE is known to have a melting point ranging from about 130-135°C, the limitation of a temperature difference of about 20°C is met. Additionally, it would have been obvious to one skilled in the art to select known materials having the claimed

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temperature difference in order to enhance stability upon heat exposure. Therefore, claim 44 is rejected.

Allowable Subject Matter

11. Claims 46-49 and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach a dual layer secondary backing consisting of (a) a self-bonded or spunbond nonwoven adhesive fabric and (b) a secondary backing fabric of an open leno weave construction comprising (i) thermoplastic tape warp yarns and (ii) thermoplastic, spun or tape, weft yarns, wherein layers (a) and (b) are needled or thermally bonded together.

Conclusion

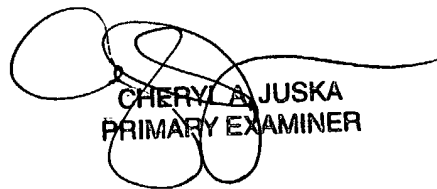
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHERYL A. JUSKA
PRIMARY EXAMINER

cj
April 7, 2004